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# INDUSTRIALIZATION PROSPECTS AND STRATEGIES IN THE 1980S (FOR SOUTHEAST ASIA)*

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* This paper has been reproduced as submitted by Mohammad Sadli of the University of Indonesia, Jakarta, Indonesia. The views expressed in it are those of the author and do not necessarily reflect those of the United Nations.

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## OVERVIEW

In projecting the possibilities and requirements of the 1980s, one cannot extricate himself from the bonds of the past. For one thing, the decade of the eighties will be a continuation of the seventies. Probably, there will be no sudden jumps in market opportunities or resource availabilities. On the other hand, there may be trends which have surfaced during the latter part of this decade, that may continue and become more important in the next decade. It is important that such trends are recognized.

Industrialization in the southeast Asian countries has proceeded well in the decades of the sixties and the seventies. These countries have been able to score over-all (GNP) growth rates of the order of seven per cent per annum or better, with the manufacturing sector usually growing faster than the average growth rate for the country. Growth rates of ten per cent and over are normal for the modern and manufacturing sectors of these countries.

How will these growth rates fare in the coming decade? There is reasonable chance that these countries can maintain the same momentum in the coming decade. The managerial, technical and administrative capabilities have grown and can certainly support a continuation of the take-off effort. The spread of literacy and the growth of a pool of skilled manpower will continue and will support a further growth performance.

Possible limitations could come from availability of investible resources and markets. Here are some serious questionmarks for the future. Perhaps, the main limiting factor will be the markets. Investible resources probably could be made up from outside, as long as market prospects are adequate. Saying this, however, one has to offer some immediate qualifications. To individual countries, foreign savings and investible resources may be forthcoming in the next decade, for instance, from Japan (as a corollary of its huge trade surpluses now), from the multinational corporations, from the regional money and capital market, as well as from the world capital markets. Some limitation, however, may arise in relation to the needs and conditions of a borrowing country. Natural resources rich southeast Asian countries (like Indonesia) will have a need for large scale borrowings for the development of its natural resources, for instance,

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for the oil and gas sector, petrochemicals, mining, metal refining, basic chemicals, etc. Huge capitals, in billions of dollars, will be required. How much external capital could such countries absorb? Will there not be borrowing limitations, or ceilings, in connexion with total risk exposures? The political climate in the borrowing countries will also influence the availabilities of external funds. In a longer run context the political climate in developing countries is always less certain. In the next five years the prospect for continuing stability, or status quo, appears to be reasonably good. Beyond that no body can be very certain.

A less promising development is the prospect of the markets, especially world markets. The uncertainty is rooted in the development of the world economy. Today the world economy is not yet out of the doldrums of the recession that affected the economy of the industrialized nations after the oil crisis. It looks like the period of high growth is past. Will this be so for good? The major members of world economic community have to undergo major reallignments. There are still too many regidities within their economies and among them. Sentiments favoring protection are still rampant and growth is sluggish everywhere. If the developing countries of southeast Asia have to depend on export led growth for their industrialization, outlook may be limited. Then may have to grow more inwardly, or try to trade among themselves, and thereby tap a wider (regional) market. This latter may have its own political problems. Developing countries are also protectionistic in their efforts to industrialize.

There is some chance, however, that the current problems of sluggish growth, protection and barriers to international trade, will gradually be resolved in the next few years, so that for most of the years of the next decade the world could see a new upsurge of world development, although probably not along the same pattern as before. Hopefully it will be more progressive, that is, a better distributed growth process. This is at the moment probably still a pious wish, a wishful thinking, but presently enough international efforts are being mounted to break the logjams and to come to terms with the new realities in the world, that some optimism is probably warranted. Some of these efforts

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should also be directed to the development of regional markets. The individual countries are continuing their economic development efforts and this will result in greater elbow room for the development of indigenous industries. The high priority given everywhere to rural and other grassroots developments carries with it the hope that some of the limitations of the domestic market for industrial development could be overcome. Of course, the right types of industries should spring up to serve these internal markets; they may be different from those that grew in the previous period, with imported technology and product designs, catering more to upper and middle class tastes and purchasing power.

If the decade of the eighties will be a continuation of the decade of the sixties and the seventies, there may be nevertheless differences, from the demand or social requirements side. There is now a strong ideological demand for equity and distribution in the growth process. This is the new challenge, for which industrial development has to give its share in providing the answers.

Industrial development has to provide more jobs; has to be more democratic and equitable in ownership and control. It may have to be better distributed geographically. The question is how to achieve all these additional objectives, and still be vigorous and reasonably efficient?

The normal pattern of industrial development has been through the market mechanism, and where private investments were more dominant than public investments. Of course, in most of the countries the Government was not completely laissez faire. If a country like Indonesia can be called typical, the Government in the last ten years made a lot of public investment in agriculture, infra-structure and certain basic industries, like nitrogenous fertilizers, cement, petroleum refineries, sugar and other plantations. The bulk of manufacturing investments, however, came from private sources, many from multinational enterprises and other foreign investments. The market mechanism was largely untampered. Of course, the Government's incentive system to encourage private and foreign investments, its fiscal and monetary policies, its trade and protection policies, all these had a definite influence on the results of the market mechanism.

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The result was a lot of investments and manufacturing development but with a distinct bias. The multinational companies and other foreign investments came in, mainly in import substitution industries. The units were middle scale, if they were assembly operations, or otherwise large scale. The technologies rather advanced and not very labour absorbing. Little fall-out in terms of out-contracting or putting-out systems developed. The import component was high. Technologies mainly staged within the enterprise. The locational pattern was that of agglomeration. Most of the industries congregated in and around the capital city, because it is there where the central government is, where the market was most dense, where the infrastructure is the best developed. Only gradually, because of high land prices, congestion, supply of labour, and some government persuasion, some new industries located themselves in other centers. Metropolitan location, nevertheless, is still preferred. Surabaya and Medan received some share in later investments.

Some of the incoming manufacturing industries, like in textiles, beverages, cigarettes, are claimed to have caused the decline of the native small scale industries. Apart from higher efficiency of the new incoming industries, may be the government policies in attracting new investments have contributed to such effects. The new industries could start with import duty privileges, with exemption of corporate income taxes, with cheaper capital from outside. The overvaluation of the domestic currency gave an additional advantage to these capital intensive undertakings and penalized the more labour intensive, established native industries. The superior advertisement and sales efforts of the branded products lured consumers away from the lower quality indigenous products, marketed only on the strength of their price.

The Government was more or less at a loss of how to interfere with such a situation. It needed the new investments to boost industrialization. Domestic capital and entrepreneurship was deemed inadequate. Even to stimulate these domestic investments the government felt it had to resort to the same incentive policies. It probably hoped for trickle down effects, fall outs and externalities. Some of these happened, but limited and slow.

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The large inflow of capital and the ensuing industrial developments had definitely some positive employment effect, but the problem that is being posed now is: could the same inputs not have had greater socio-economic effects with other policies?

To achieve a greater distributional effect, in terms of employment, income and location, should the Government be more intervening in the market place? Should intervention include more restrictions and regulations? For instance, should the Government not have a list of "reserved industries" (like in the current Indian scheme) for smaller scale indigenous enterprises with local technologies, like in certain qualities of textiles, beverages, matches and cigarettes, etc.? Should the Government révise its incentive, fiscal, trade and currency policies, to clean up the price system so as to reflect better the comparative advantage of the country? Should the Government spend more money for technical assistance, training, research and development, and other inputs, to raise the productivity of the indigenous industries, rather than restricting the growth of large scale industries in an effort to protect the small scale sector?

Such are the questions that have to be pursued in anticipation of the development requirements of the eighties.

In dealing with a region or a sub-region in the world, one should not lightly generalize the problems of industrialization, or development, In southeast Asia, at the one hand, is Indonesia, a large country in population and area, rich in natural resources but poor in <u>per capita</u> income standards, and where effective industrialization just started a decade or so ago. May be close to fifty per cent of its population is still under the poverty line and the content of unemployment is about one-third of its manpower. Even an annual six per cent increase in employment (against a 2.5 per cent increase in work force) will require a long time to mop up the back log in unemployment. Hence employment generation and distribution is of paramount importance for all aspects of economic development. On the other extreme, Singapore is a city state of already high <u>per capita</u> income, and its problem os industrialization is mainly a problem or raising productivity and keeping in line with shifts in international comparative

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advantage. Malaysia has no overpopulation, has a well developed and productive agriculture and mining. Employment creation to reduce structural underemployment and unemployment may not be so great a social imperative, and its further industrialization may lie in seeking new export potentials.

In the eighties, industrialization in the southeast Asian region will, by and large, proceed along the same lines as before, that is, along exploiting domestic markets and producing for foreign markets.

The first phase of the exploitation of domestic markets consists of import substitution industrialization. Usually, in the first ten years this is clear cut replacing old imports. This phase is often accompanied by tariff protection or other types of government assistance. After some ten years the further growth of this sector depends on the growth of the domestic economy and import substitution shifts to the replacement of non-consumer goods. The growth of effective demand and how this will be served by the further development of domestic industries merits policy attention. To what aspects could this growth be influenced to maximize employment creation, or some other socio-economic objectives, such as better regional balance in new locations, providing more entrepreneurial opportunities for some social categories, etc.

There are several avenues for export oriented industrial development in southeast Asia. A natural resource rich country like Indonesia could develop its agriculture, petroleum, mining and timber potentials into processing industries and export the refined commodities or manufactured goods. Examples are refined edible oils, processed coffee, tyres and other rubber goods, petroleum refinery products, petrochemicals, refined tin and nickel, veneer and plywood. Other southeast Asian countries could continue their industrialization the same way. There is ample scope for such developments in the Philippines, Thailand and Malaysia.

Another avenue for export oriented industrial development is the exploitation of a comparative advantage, i.e. its low wages. Labour intensive, low and medium technology industries, producing for the

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international markets, have sprung up in countries like Singapore, Philippines, Thailand and Malaysia. Indonesia, which has the lowest wages in the areas for some reasons has not been able to attract these industries. Lack of good transportation and handling facilities, too much red tape, ineffective governmental rules and policies, overvalued local currency, were serious drawbacks in the Indonesian scene, as compared to locations in other southeast Asian countries.

After the first and obvious opportunities of low wage and foreign markets are used up and market limitations arise, partly because of protectionistic attitudes in the receiving countries, other modalities of exports of manufactured goods have to be explored. Greater efficiency through scale operation; higher quality products; penetration of non-traditional markets (for instance, regional markets); differentiation between home markets and foreign markets; etc., all such strategies have to be tried out.

While having to maintain efficiency and competitiveness, governments have to decide to what extent some of these requirements can be traded off, or sacrificed, to achieve other social goals, domestically, such as employment, equity and distribution.

Southeast Asian countries, at least the ASEAN part, have been growing largely as open economies, with expanding foreign trade and receiving considerable foreign investments and other capital inflows. It is most likely that this trend will continue in the eighties. In terms of over-all economic growth, as well as the industrial sector, their performance was reasonably successful. The growth of their agricultural sectors has been less marked and differs from country to country. The modern agriculture sector, related to foreign trade, such as the plantation sector and timber, has been more dynamic. Productivity in the food production agricultural sector often is somewhat lagging behind, and productivity here, although rising, has not equalled yet levels in Japan. Further progress in this sector may be crucial for the long run growth of the economies. The growth of the industrial sector will also depend on this traditional sector in the longer run. This is certainly

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the case of Indonesia, where food agriculture has shown declining growth rates in the last five years plan. How should industrial growth in the decades ahead be related to these dimmer prospects of market limitations, internationally as well as domestically?

The New International Economic Order is yet an uncertain prospect because of present day political realities. But when it is available it will facilitate the industrialization of the developing countries. Significant international efforts are being mounted to keep the momentum going, and the southeast Asian countries are very much in the forefront of this diplomacy. The process will be evolutionary rather than revolutionary, and the results probably peacemeal, but some positive effects could be anticipated in the eighties. Better access to the markets of industrialized countries, commodity stabilization arrangements, liberation of capital markets, accommodations with respect to the operations of multinational corporations, improved capital and technical assistance from advanced countries, all these will help the further process of industrialization of the developing countries. The momentum in the international dialogues and negotiations should not be abated.

For whatever it will be worth ultimately, the concept of "Technical Co-operation among Developing Countries" (TCDC) should be popularized further and made operational. Southeast Asian countries could receive technological assistance from neighbouring developing countries already somewhat further advanced in their industrialization, e.g., from Korea, India, etc. Such countries could export some of their know-how, in collaboration such as in joint-ventures and this may contain more appropriate technology. International and regional banks probably could lend a helping hand in fashioning these ventures. These industrially advancing countries need raw materials and intermediate goods for their domestic industries that can be procured from the developing southeast Asian countries. Some of these developments already are visible in the late seventies, and should be encouraged in the next decade.

The ASEAN countries could also enlarge their markets and thereby facilitate industrialization by market collaborations. Initial steps are

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already taken, in the form of Preferential Trading Arrangements (PTAs) and Industrial Complementation Schemes. There are still a lot of hesitations and other impediments, because of conflict of national interests, but a common political will and interest is being nursed that gradually may overcome some of the political obstacles.

The harnassing or better utilization of the capabilities of external multinational corporations for the purpose of fostering an industrialization process more attuned with the long run needs of the host countries, has to be further pursued. These multinational corporations have made an important contribution to the development of industries but in the process they probably tried to transform the host countries into a replica of their home countries, in terms of tastes and market preference, technologies, industrial structures, etc. In the application of their technologies they should be more considerate to the real social needs of the host country, especially with respect to employment, use of domestic raw materials, local engineering supplies and services, etc. There should be more collaboration and integration between their, often large scale, operation, and native smaller scale ventures which could function as sub-contractors. Their product design, product differentiation, and marketing policies should also take more into consideration the stage of development of the country. These objectives are apparently already more achieved in the Indian situation, but it may have been at a cost of too much restricting the role of these multinationals. In southeast Asia the domestic policies have been more liberal and often the multinational companies could execute a majority owned direct investment, employing all their trappings. Apart from observing governmental restrictions and interventions, the hope is that the multinational corporations from their ownselves will be moved to better accomodate with the social needs of their developing host countries. The dialogue between multinational companies and developing countries must continue in the eighties for mutual education.

The link between industrialization and the development of the major sector of the economy, i.e., agriculture, should be more effective and mutually reenforcing. So far most industrialization is directed towards the substitution of imports, often providing the goods at higher

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cost, or towards serving export markets. Of course, the rural and agriculture market is also being served in this process, to the extend the effective demand in this market correspond with what the industries produce (e.g. chemical fertilizers, pesticides, power tillers, etc.), but the interface can be made more organic and mutually reinforcing. The main defect of the rural and agriculture market is their weakness of effective demand; the main feature of import substitution industries is that their product offering is often more oriented towards higher income demands, to be found in more urban areas. Of course, the logical solution is that local, small scale industries and handicraft must serve the rural markets, e.g., in the basic needs of the people. These industries, however, are traditionally too primitive and stagnant. If agriculture is being modernized, these small scale and cottage industries should also be energized. Their technologies should be upgraded, while still retaining appropriateness of character; also their product development and marketing should be improved. A lot of technological, managerial and marketing assistance should be channeled to this sector, and the question is from where should it come? Obviously, the government has a main responsibility. But private enterprise could play an active part also in reaching the rural and agriculture markets, and there should be active and productive links between the large scale urban, often foreign, enterprise or joint ventures, and the medium scale and small scale indigenous sector, for a smooth transfer of technologies and their appropriate applications.

Finally, one must again stress that it is extremely difficult to make broad generalizations about industrialization strategies between countries. In southeast Asia there is a large country, like Indonesia. There are medium size countries like the Philippines, Thailand and Malaysia, and there is an island state like Singapore. Large countries often are tempted to grow more on the basis of its domestic market. Such countries are often inclined to build steelmills, etc., before the market really justifies. Medium and small size countries will be more ready to proceed along export promotion lines.

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Differences in per capita income and population densities will also create variations in industrial policies. A country like Indonesia cannot overlook its underemployment and unemployment problem and industrialization will be called upon to contribute its utmost to the solution of this problem. In the process it has to struggle along with a dual economy and try to make the two sectors reasonably compatible. The higher income and already more industrialized countries will not have this problem in such accute form.

Differences in political outlook, and some domestic socio-political problems (e.g., the one pertaining to racial balance) will also influence the courses of industrial policy. Some countries may try to achieve more things through state intervention and state owned enterprises, other may rely more on private capital, foreign as well as domestic. Such political policies may influence the speed of industrialization and the resulting efficiency structure.

However, in spite of these country differences, the southeast Asian countries in all likelyhood will continue their progress of industrialization along the path of more or less open economies, where exports will be accorded high priority; where private capital, foreign as well as domestic will play a major role; and where the Government will not adopt a laissez faire attitude but will always try to influence development by active planning.

## I. INDUSTRIALIZATION FOR THE DOMESTIC MARKET

An early development of manufacturing is probably the application of simple mechanical processes to local raw materials, the products of which are consumed in the local market. The basic local needs are in food, clothing and shelter. The early mechanical processing still excludes automotive power. This simple technology industrialization process is still continuing in poor countries. Hand pounding of paddy, beancurd processing, handloom weaving, brick and tile making, are some of the examples. In low-income developing countries these village and home industries will continue in the eighties. As a matter of fact, they should be encouraged

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and technically assisted, because they are labour absorbing. They have been retreating against the factory production and in the free market place their competitive power is declining. Yet because there is still so much un-and underutilized manpower in the villages, and monetary incomes and wages are so low, some form of non-market mechanism to encourage enlargement of this informal sector should be attempted, for instance, through co-operatives and other self-help arrangements.

As the economy develops, per capita incomes rise; infrastructure and transporation facilities widen, and the market economy extends; factory production of goods will more and more dominate the process of industrialization. Before that happened, however, the export sector of the country typically has grown, mostly along agriculture lines. Sometimes also in other primary sectors, like mining. The export proceeds make it possible to import consumption goods and other necessities from abroad. The country becomes a market place for far away, more industrialized countries.

Manufacturing industries cannot easily grow within such under-developed and poor countries, because of small markets, poor infrastructure, lack of capital and entrepreneurial skills, also skilled workers. If the country is a colony the trade policy is usually very liberal, that is, no early protection is given to local manufacturing. The colony becomes an extension of the markets for industries in the metropolitan country.

Since the period of the Great Depression, however, manufacturing industries have been encouraged. The first such factories in Indonesia dated from this period. Even colonial governments became aware of the uncertainties and vagaries of the international commodity markets. Cyclical swings and periodical reversal of trends in the terms of trade, coupled with mounting population pressures, necessitated policies of diversification. Industrialization becomes logical, next to the continuation of exports of primary commodities.

The easiest road to industrialization for the domestic market is so-called import substitution. The domestic market is already there, served by imports from abroad. This market was probably developed by importers or trading houses, often connected with the metropolitan centres.

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Government policies are instrumental in encouraging the establishments of such industries, either in the form of some fiscal incentives or some non-monetary encouragement (e.g., provision of land, attention and access, some general guarantees of a political nature, etc.). The most popular governmental encouragement, however, is probably tariff protection and other barriers to competition and entry.

These early import substitution industries are perceived as non-competitive vis-à-vis imports. These domestic industries will be somewhat high cost industries, requiring protection. The usual arguments are submitted: limited markets preventing economies of scale; higher investment costs per unit of capacity because extra infrastructure requirements, greater shipping and erection costs of the factory equipment; higher cost of maintenance; higher salaries of expatriate personnel; higher prices for the imported raw materials and intermediate goods; higher risk and thus higher required return on capital; etc.

All these handicaps can invoke an infant industry and infant economy argument, requiring protection to survive against import competition. In most instances this protection is given, in the form of import duties, quotas, outright import prohibition, industrial licencing, etc.

The response to such encouragement and protection is usually quick and vigorous. In the post-war years, the development of import substitution manufacturing industries in southeast Asia in one decade is already impressive.

Because in these countries entry of foreign multinational companies has been free, thanks to the foreign investment encouragement policies, the first takers of the new opportunities have been these companies. Often they have already an established market in these countries served from abroad, and they realize that if they do not move in quickly and establish themselves behind the tariff barrier, they may lose their market, or their market share may be reduced. Hence such new establishments are so-called tariff barrier jumpers.

They only move a last stage of their manufacturing process into a new country, but still maintain the production of intermediate goods

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and components in the home countries. This first phase of import substitution contains a lot of imported components and the domestic added value is small. Domestic value added without computing capital inputs is still smaller and usually consists of labour and may be fuel. Even packing material is often imported. The capital inputs are often foreign and their inclusion in domestic value added becomes questionable. The cost of setting up an assembly or formulation plant can be very minimal. In Indonesia, in dollar prices of the late sixties, they amount to about one million dollar, sometimes less, sometimes more, and this includes expenditures for infrastructure such as for power, water and transportation.

Because of their low value added there is an important difference between nominal rates of protection and effective rates, the latter being calculated on the basis of value added, including capital or only labour and other domestic inputs. Hence these import substitution industries flourish behind high tariff walls.

Their inefficiency and low productivity excuses becomes self-fulfilling and self-perpetuating. Government policies have to accept the greatest responsibility for this development. Even with a gradually increasing market (growth rates up to ten per cent a year, sometimes greater) economies of scale cannot materialize, often because of market fragmentation. Governments are often at some loss here as to how to act. It can restrict further entry, and for instance, grant monopoly or oligopoly position to the first comers. Or it could select winning bidder (s) from a tender and grant exclusive rights. Market proliferation can be avoided and economies of scale can be realized sooner. The social cost or risk is the tolerance of a monopoly or collusive oligopoly, often of foreign origin, which may become less palatable politically.

The development and availability of general social infrastructure and that of external economies take a long time, more than one decade, and in the meantime these import substitution industries cannot quickly improve their productivity and competitiveness. The high original capital cost; the greater requirement for rates of return; royalties, technical fees and expatriate personnel costs; high cash flow requirements to pay

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back loan capital and interests; and other such costs items, freeze the incompetitiveness of these industries, and there is often an obliging government to continue the initial protection.

Backward integration into manufacture of intermediate goods and raw materials does not proceed expenditiously, because of the same arguments, and even more compelling. If the Government insist, some companies will oblige, but again after a new round of concession in protection. In the meantime, rationalization of the industry, i.e., reduction of proliferation, takes a long time in forthcoming, although often such becomes stated policies.

These import substitution industries, often set up by, or through, foreign capital, have also not done well in their fall-out effects. Little subcontracting is done. Quality considerations are often invoked, but implicitly, dislike of loss of control probably weighs more heavily with the large multinational companies.

Technologies are often extensions of those developed and applied in the source countries; they often are propretiary or part of the factor endowment of the multinational company, and hence they tend to stay within the company. The only fall out to the host country is in the form of general skills and experience in management, technical services, etc. Skills for product and process improvements and designs are not cultivated locally.

The employment effects of the import substitution industries are important but very limited if compared against the backdrop of huge underemployment and unemployment. In the past ten years the amount of absorbtion of direct labour in the new import substitution industries in Indonesia was in the order of a several hundred thousand. By itself a significant number, but totally inadequate if compared with the macro-economic requirements of the country. The answer is, of course, that this sector of the economy cannot be expected to shoulder that burden alone. Also the indirect employment effects should be considered and counted, where possible. The growth in domestic manufacturing industries will bring with it concomittent development in trade, transportation, service and

maintenance activities, etc. In Indonesia we have little empirical information about these magnitudes. They could be important. If there are complaints about domestic employment and value added impacts about these import substitution industries, it is because of certain properties of their system. It should be understood, however, that this should be taken in the context of import substitution industrialization where multinational corporations are playing a major role. Their technologies, their product development, their backward linkages with the outside world, and their inclination towards protection of market power and market share, etc., make their contribution to the process of domestic development somewhat limited. But if they are to blame, the host governments with their incentive policies are also equally at fault.

The term import substitution industries connotes that the country will save foreign exchange by their entry and development. This may not be always true. If the major domestic content is labour, at low wages, while most other inputs are still imported, including capital and some personnel, the total unit cost of all imported inputs may not be lower than the cost of built-up goods, if the total costs is higher than the c.i.f. costs of the substituted imports. With protected markets this would be an easy possibility.

Moreover, once the multinational company establishes a domestic operation it usually engages in a more active advertisement and selling effort, often because of excess capacity in its production facilities. The growth of consumption of such articles proceeds at a fast pace, often at the cost of the local indigenous industries. With rising incomes this tendency is reenforced. Successful import substitution industrialization thus does not necessarily reenforce the balance of payments and the dependence of the economy to the vagaries of international trade is not lessened. The protection of the balance of payments should probably not be done through industrialization; macro-economic policies are more adequate. If the first phases of industrialization have to be carried by multinational corporations and foreign capital, these effects are probably unavoidable.

If there is such heavy reliance on foreign investments, may be the Government policies to encourage these investments should be reconsidered.

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The usual incentives given by southeast Asian countries are income tax holidays or reductions, import duty privileges for bringing in capital equipment and raw materials, investment allowances and accelerated depreciation, etc. Such are all incentives to import capital and technologies and may easily favour capital intensive processes. The use of local raw materials and labour does not carry monetary advantages; often it is the contrary, because such usages are often subject to sales and wage taxes. If there is an overvaluated exchange rate, such as was the case in Indonesia between 1971 and 1978, then the distortions get aggrevated.

The labour market for foreign investments and large scale enterprises is also imperfect. Labour union movement is stronger here than in the smaller scale indigenous enterprises and the going wage rates are higher. This is condoned by the Government and socially considered fair. The larger market power of the bigger enterprises, especially of foreign enterprise, should be matched by a countervailing power of organized labour. The effect, however, is that foreign investors like to minimize labour requirements, because they can control machines better than alien labour in organized form.

All these forces and tendencies working in the economy and society in the end produce a dual structure of economy, with different effective factor proportions and prices in each sector.

It is not lack of insight within the Government that produces the inappropriate policies. Governments are often well aware of all these distortions but feel little capability to deal with the matter effectively. It often has to rank priorities. What is more important, to attract investment, including foreign investments, or to provide maximum employment in a balanced and self-reliant economy? In some period, because of lack of feasible alternatives, it is compelled to give priority to the encouragement of private investments, private foreign investments not the least. After the entry of private foreign investment, domestic investments will be encouraged to follow, in a follow-the-leader fashion, as could be seen in the Indonesian case. Foreign investments were pace

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makers. In the last five years the leading role of foreign investments in domestic industries has been gradually taken over by domestic investments. Behind these domestic investments, however, is a lot of foreign (loan) capital and technological link-ups.

There has been a gradual process of reduction of the incentive system favouring capital, but the Government felt that it had to move cautiously, because it did not want to create the impression that new investments are now less welcome. There is also a timidity in intervening in the choice of technology, product design, appearance and quality, advertisement, etc., because such may be interpreted as too much interference with management prerogatives. Too much governmental interventions may curb the incentive to invest or expand production. It may even result in higher cost, and less efficient, production.

There should be at least a gradual attempt to clean up the price system in the market mechanism, and to remove some of the obvious distortions. The Indonesian devaluation in November 1978 (from Rp 415 to Rp 625 to a US$) was such an action. With a removal of the overvaluation of the local currency the factor prices (capital against labour) are brought better in line. The reduction of import tariffs and other non-tariff barriers will reduce some of the excessive protection imbedded in the old exchange and tariff system. The removal of fiscal incentives favouring capital above labour is not done yet. Such a step may be more difficult because of the reservation that it may inhibit the inflow of capital. As long as investments in lesser developed economies require more capital because of additional investments are needed for infrastructure (electricity, water, housing, etc.) and rates of return have to be higher, the present fiscal incentives may have to be maintained.

The Government has also to take into account the interaction between the domestic industry working for the home market at one hand and that working for export on the other hand. If the domestic market industries are high cost entities they will impact on the export capability of the e economy.

Often these export industries could be shielded from the inefficiencies of the domestic economy by siting them in special areas, such as industrial

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estates or export processing zones. This work well for industries specializing for exports, but export drives would be more effective if the domestic market industries could also develop an export capability, without the necessity of governments to resort to special export incentives or subsidies. The latter may even invoke the restriction of markets in the receiving countries.

The foregoing is a description of an import substitution industrialization spearheaded by multinational companies. The who of the act seems to be important. Multinational companies bring with them a particular set of market behavior: then competition is international (as part of the oligopoly they compete through product differentiation); demand is created by aggressive advertisement and appealing product design; the target group in the market is the middle and upper class; the technologies are dynamic because it is an important part of their international competition. They tend to create demand (for their special brands) rather than serving a socio-economic need of a society in a poor country.

There may be other alternatives or scenarios for industrialization for the domestic market. In the southeast Asian countries, however, the alternative based on multinational companies seems to be the dominant one.

A possible alternative is that national companies should take the lead. The international companies could participate only as suppliers of technology and know-how. The major multinational companies may not be very interested, if it is true that their main interest lie in control and in the marketing of their branded products. If the national companies are still weak, in the co-operation with these international companies they may become vehicles of the same oligopolistic competition between the branded products.

There are countries which want to rely on state enterprises to form some alternative to multinational companies. In countries where the private sector is still weak government enterprises can fill this gap. Because of government backing, and because they can act as "the instrument of the state" in pursuing social and economic objectives, state enterprises

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can be more forceful. There are a few examples of such role. In Indonesia, for instance, there is a government owned pharmaceutical company, next to the numerous multinational pharmaceutical companies. This government own entity can do a good job providing cheap medicine for the masses, dispensed through grassroot people's clinics. In middle and higher income classes, in urban areas, however, the appeal of the drugs marketed by the international companies is formidable. In certain countries the cigarette industry is in the hands of a state monopoly, and is working well, from a social and from a fiscal standpoint. In other countries (like in Indonesia) it is free and dominated by an oligopoly of international companies. Brandname advertisement is intensive, and probably socially wasteful. On the other hand, unlike in other countries, in Indonesia gasoline marketing is a state monopoly, operated through Pertamina, the state owned oil company. Probably, the distribution and product differentiation of petroleum fuels could be organized, this way, more in line with social objectives and appropriateness than would have been the case with a private oligopoly. One has to recognize, however, such statement may lack empirical evidence, and probably is more an article of faith.

An important aspect of import substitution industries is the degree of imported content that is still in the final product, or measured from another angle, the degree of local content. The greater local content the better. For certain products for which much local material is available, the degree of local content is naturally large. Good examples are cement and fertilizers. On the other hand, for automobiles, pharmaceuticals, electronics, etc., local content must increase gradually, may be over a long period.

One policy option could beg itself: do not rush into assembly type of operations where the imported content is very high. Do not give them incentives and protection. Rather wait until the market widens enough to sustain a more substantial production. Usually, mere assembly operations are inefficient and high cost operations, and can only survive behind high tariff walls. Yet most governments succumb to the prospect of seeing

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more manufacturing establishments, where technical skills could be trained. They believe also in the proposition that once a multinational company has established a manufacturing operation, albeit superficial, it can be better persuaded in the future to increase the local content. The company must, so to say, make its feet wet, and try out the local manufacturing climate.

What are the subsequent stages in the import substitution industrialization and what could the pattern be in the eighties? By definition import substitution will never see the end of theoretical opportunities, because there will always be imports or importables. As a matter of fact, with increasing national income the import bill will subsequently rise.

After a first phase, often some ten years, there is a very visible decrease in imports of consumer goods endproducts, in favour of raw materials and intermediate goods. Also imports of capital goods increases. In the second stage more and more intermediate goods are produced domestically. With increasing industrialization the import bill of capital goods increases further. In the meantime, there may be an increase of imports of certain consumer goods, for which the country has no immediate comparative advantage, or when the consumption is going up faster than the growth in production. Indonesia's biggest import item is, for instance, food, i.e., rice and wheatflour.

Import substitution gradually becomes import competing. Complementary division of labour between raw material producers and manufactured goods producers gradually assumes a new dimension of supplementary exchanges such as exists between industrialized countries, e.g., Germany exports Mercedes cars to France and France exports Citroens to Germany. Indonesia imports textile from Singapore but Indonesia also exports textile to Singapore.

After some ten years the early import substitution industries usually face market saturation. If the national economy grows by seven to eight per cent and these industries are growing at higher rates,

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often some ten to twelve per cent, domestic market saturation will not be long in coming, since the purchasing power of the masses may not grow as much as the rate of growth of national income. The early import substitution industries usually tried to exploit these mass markets, for instance in textiles. In other commodities, like pharmaceuticals, consumers electronics, motor vehicles, etc., the rates of growth of demand is high but the size of the market is often still limited and the entry of new (assembly) firms rather strong. Overcapacity in these industries can develop in not too long a time.

Because these industries enter behind high effective rates of protection, usually they lack structural efficiency, because the size of operations is too small, underutilization of capacity chronic, investment cost overvalued, etc. The result is that when domestic markets become sluggish they are not in a good position to effectively compete abroad.

Nevertheless, exports are the only way out for such industries, at least to balance their capacities. In the further development of these import substitution industries exports become an emerging requirement. Although these import substitution industries may have inherent deficiencies causing inefficiencies, nevertheless, on the basis of direct costs, they are often able to compete in the foreign markets, as long as their bread and butter market is the home market. Exports may increase the rate of utilization of capacities and thus add further economies. After such industries are used to exporting part of their output dynamic repercussions of a favourable nature can set in. The mentality of the management changes and becomes more dynamic, product differentiation and quality oriented and more sensitive for cost saving requirements. In southeast Asia the development of exports of manufactured products from countries like the Philippines, Thailand and Malaysia attest to these tendencies. Indonesia is still trying to break out from the domestic-market-import-substitution ban. It was hampered in doing so because of the inefficient drawback system of implied import duties and other red tapes form exports, an overvalued exchange rate, and high transport costs. It is now being pushed into the export market by sluggish and proliferated market domestically, excess capacity and exhortions of the Government.

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The companies in a better position to undertake these new exports are the foreign and joint venture companies, because they usually have a better access to the market. The markets are nearby or medium distance, i.e., not far away markets. Indonesia can export to the other ASEAN countries, to the Middle East countries and to the East Asian countries. Of course, market access is not easy. Competition is fierce and some of these markets are also heavily protected. That is why no major volumes are likely to move in a short time, but the process is set into being. One has to hope that this process will create its own dynamics and momentum.

Foreign investments have played a major role in the industrialization of southeast Asian countries. A lot a criticism is leveled at the results of multinational companies' entry, but there is not much alternative, and their further investments and expansion are still needed, also to break through the domestic-market-import-substitution barrier.

In the eighties national governments, on the basis of their experience, may try to improve their incentive systems to encourage new investments, their general and sectorial policies, so as to balance the aim of investment promotion with other requirements, such as employment creation, income distribution, regional imbalances, equity problems, etc. These may reflect themselves in fiscal policies, commercial policies, exchange rate policies, industrial licensing, wage policies, infrastructure development, etc. The price mechanism should reflect the country's factor endowment; the market mechanism should function more smoothly to facilitate the proper resource allocation; the macro-economic policies should not distort the price and incentive system and creating an unfavourable bias for labour absorbtion and employment. If the climate and market mechanism is "right", then host governments could supplement these with persuasions and exhortions on the part of the multinational corporations to operate and expand more in line with the development requirements of the country.

A difficult policy problem relates to influencing consumption patterns in developing countries and their interaction with promotional activities of these companies. Should the Government respect consumers

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preference and stay away from censoring the development of tastes and preferences? On the other hand, these values are being manipulated by the industry through advertisement, product design and differentiation. The result may be a consumers economy socially not very appropriate for a low income developing country. Policy intervention in this matter must rest on a value judgement, that the Government, as the guardian of public interest, has the right, and an obligation, to put straight what it regards as distortions in consumption patterns. This may easily become an controversial issue. As a popular and dramatic illustration, one can pose the question: should a poor country allow its society to consume Coca Cola, an expensive imported drink, at least as a concentrate, to the detriment of the growth of local soft drinks? Trouble is, practically all countries in Asia already drink Coca Cola, and even the People's Republic of China seems to have given Coca Cola the right to market its product in this socialist country.

A pragmatic compromise is to allow the consumption but cream off the consumer's surplus through an excise tax. Conspicuous consumption is hereby put to work to collect taxes which can be used for more socially beneficial purposes. A differential excise tax can also protect native industries producing the same general product (though of lesser appeal or quality) by more labour intensive methods and greater local content, but which otherwise will have to suffer in the competition.

This intervention, however, begs another problem. Suppose the multinational soft drink company tries to be helpful to the country and applies its technology to the bottling, promotion and distribution of a local popular soft drinks, such as fruit juices, or tea? Is this not what the host government always had wanted? Yes, but suppose that in the process of "taking over" the local products small, indigenous, and upcoming more modern indigenous soft drink bottlers will be wiped out of the market? It will be politically difficult to condone a development where a native industry is wiped out by a foreign company by competition. But if foreign investments are welcome, but in certain sectors they are not welcome to expand, what is the general attractiveness for such companies to come in (or stay in)? This is often an embarrasing question, directed to host

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governments. The major attraction is often the over-all growth of the market and the share that foreign companies can enjoy in this. Multinational companies' policies should grow flexible and not always insist in the traditional pattern of their investments: direct investments, control of the operations, and use of own technologies and trade marks. They should be willing, in addition to some of this traditional operation, to engage in selling only their technologies, their marketing know-how, their product development experience, without always coupling this to their brand names and direct control.

In any event, many problems in relations with multinational companies will remain unresolved, but in the eighties their presence in the developing southeast Asian countries will still be needed and encouraged, and the resolutions of conflicts of interest will have to be done by a process of continuing dialogue and accommodations.

There may be other ways how predominantly import substitution industries in southeast Asian countries could cross the export barriers, with respect to product development, promotion and marketing. One way may be is to engage the services of foreign trading houses, such as the Japanese, the British, the Dutch, etc. These companies have their established international network. They are "marketeers" par excellence.

In ASEAN countries the idea is now also popular to set up national trading houses to operate internationally and to help export promotion. Such entities could co-operate with the established foreign trading houses, forming joint ventures or other links.

Another idea is to invoke the idea of Technical Co-operation among Developing Countries (TCDC). Indonesia, for instance, could ask the assistance of Korea in the promotion of new Indonesian exports. Korea has had very successful experience and might be willing to lend a hand to a late comer fellow developing country. The quid-quo-pro is that Korea will need Indonesia in its further development requirements. A Korea may need to turn to a country like Indonesia, in the eighties, as new markets for its industrial products, as locations for its overseas investments, and as sources of raw materials.

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Will the export drive of these basically import-substitution manufactures not be stymied by limited markets overseas, in the eighties, because of slow growth in the industrial countries and protectionistic attitudes in the other developing countries? This is a very important question for which there is no ready optimistic answer.

In conclusion, in southeast Asian countries in the eighties, further industrialization will partly continue along import substitution lines. Its character will change into import competing, and the product coverage will deepen. Consumer durables, intermediate goods and even capital goods will be produced. International companies and investments will continue playing an important part. National companies will also grow. State enterprise will continue playing an important role and significant expansions can be expected. National companies will grow in collaboration with international companies. The problem of integrating the multinational companies with the socio-economic requirements of the host country will continue occupying the attention of governments and the society. The linkages between large scale enterprises at one hand and the indigenous small scale establishments should be better developed.

The major problem of import substitution industries is their further development into export-capable ventures, because otherwise they will be constrained by market saturation domestically. On the other hand, these industries will have to become more dynamic in that they can, so to say, create additional markets, beyond the urban centers. Such requires acts of innovation. May be industry cannot do it alone. The country's distribution system must often be modernized also.

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## II. EXPORT ORIENTED INDUSTRIALIZATION

Import substitution industrialization is the easiest path for a first phase, especially for a country with a large domestic market, but it is usually portrayed as a dead-end street. The fast initial growth of this sector, often accomplished by high protection, will be decelerated by the much slower growth in GNP and the agricultural sector, and this type of industrialization will peter out.

This is why export oriented industrialization as a longer run option holds more promise. It relates industrialization to the world market and hence, theoretically, will have more elbow room for growth. For small(er) countries it is a must from the outset because the domestic market is too small. It is more clearly based on comparative advantage and hence provides a stronger foundation for the country's further development.

Import substitution and export oriented industrial development, however, are not black and white choices. Import substitution, or domestic market exploitation, always precedes export promotion policies, like in Korea, and even in Singapore. Successful import substitution then spills over into the export market. The most important part of this process is crossing the threshold. From the supply and industry part it depends on the growth of efficiency and productivity, from the macro-economic and government part it depends on the policy climate and incentives system.

Export oriented industrial development requires a firm commitment from the part of the government to accord it highest priority. It should override the demands for protection, i.e., too much protection, from the part of import substitution industries. The best example is of course the success story in east Asia in the decades of the sixties and the seventies, that is, South Korea.[1/]

The first policy requirement, probably, is that the exchange rate of the local currency should not be overvalued. For developing countries wanting to engage in ambitious development efforts and, in the process of it engendering domestic inflation, this may require occasional devaluations.

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1/ In the following the author has borrowed liberally from a description and analysis of the Korean economy by a H.I.I.D.-K.D.I. Study of Korean Modernization, and from Larry E. Westphal, "The Republic of Korea's Experience with Export-Led Industrial Development" in World Development, 1978, Vol. 6, No. 3, pp. 347-387.

South Korea devalued its currency several times. Its first phase industrialization, from the end of the Korean war (1953) to 1960, may be characterized as the phase of easy import substitution, while the country was trying to reconstruct the economy from wartime ravages. In this period domestic inflation was high and required periodic devaluations. In between, the foreign exchange regime was controlled to cope with emerging over-valuation. The Government took various ad hoc measures to alleviate excessive demand for imports and to offset disincentives to exporters. The result was the emergence of a complicated system of multiple exchange rates. On balance, however, industrial policies during this period was mainly inward looking. Exports remained at a low level. On the other hand, high tariffs and a variety of quantitative trade restrictions encouraged import substitution, particularly in consumer goods industries.

In the beginning of 1961 there was a large devaluation of the local currency. This devaluation was abortive because of the ensuing political and domestic economic policy developments. Monetary stabilization could not be maintained because of expansionary policies to stimulate the domestic economy, and a multiple exchange rate system and foreign trade control were practised again. In 1964 the Government resorted again to a substantial devaluation (from 130 Won to 256 Won to a US dollar) and succeeded to maintain monetary stability after that. The devaluation served to restore the real exchange rate to the 1961 level. The Government undertook fiscal and monetary reforms to assure the maintenance of the real rate and succeeded in unifying the exchange rate by allowing it to float beginning in March 1965. The quantitative controls over imports were gradually eased as the trade balance improved.

Earlier already, during 1961-1965, export incentives were expanded to accentuate the Government commitment to growth through export-oriented industrialization, for instance, by providing direct subsidies for certain selected commodity exports, thus overcoming the negative effects of an overvalued exchange rate. In 1963 a direct export-import link was established giving the right to exporters to use the full amount of their export earnings for imports or sales at the market exchange rate. These export promotion measures, however, were abolished after the 1964 exchange rate reform, although subsequently the export-import system was again introduced on a very limited scale to promote exports of certain selected new commodities.

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The other export incentives provided during this period of 1961-1965 included: (1) tariff exemptions on imports of raw materials for export production; (2) domestic indirect tax exemptions on both intermediate imports used for export production and export sales; (3) direct tax reductions on income earned from exports and other foreign exchange earning activities; (4) a preferential export credit; (5) importer's licenses linked to export performance; (6) wastages allowance subsidies; (7) tariff and tax exemptions granted to domestic suppliers of intermediate goods for export production. Some of the above measures are designed to mitigate temporary overvaluation of the exchange rate and the imposition of import controls. Other measures serve to enable export producers to purchase intermediate goods at world market prices, where other measures give profit incentives for the production of exportable goods.

Although the policy emphasis had shifted towards exporting, import substitution was pushed on a selective basis. Foreign loans and direct foreign investments were encouraged in this period to augment the development drive.

The period of 1961-1965 can be characterized as a transition period from the earlier period of easy import substitution to the later period of export drive. This reference to the set of policies adopted serves to stress the importance of the determination of a government to engage in export oriented industrial development. There was even instituted a government export targeting system as a means of strengthening the government drive for export expansion. The Korea Trade Promotion Corporation (KOTRA) was established in 1964 to intensify the government's support for overseas market development. Korean embassies and ambassadors are given targets of exports to achieve.

After the transition period the export expansion policies were more stable and the results dramatic. The policies that had been adopted in the transition years was continuously maintained, with some modifications in the face of changing economic conditions.

Domestic inflation rose more rapidly than in industrialized countries. Although a unitary floating exchange rate system had been nominally adopted by the government, the exchange rate was actually pegged thereafter through government intervention. Thus, in order to maintain the purchasing power parity-adjusted, real exchange rate constant, the government abruptly

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devalued the currency several times during the period from 1966 to 1977. When the exchange rate became overvalued between devaluations, the government increased indirect export subsidies and tightened import controls to counteract the currency overvaluation.

The tariff system was gradually modified from its earlier protection function and control of imports to one more amenable for an open and export oriented system. Outright tariff exemptions for intermediate goods for export production were changed into a draq-back system, under which exporters obtain a refund of these tariffs when exports were actually shipped out. The final reform which became effective from 1977 generally reduced the degree of escalation from the lowest tariffs on raw materials to the highest rate on finished products.

Elements of subsidy are existent in the incentive system. For instance, accelerated depreciation was granted for the fixed assets of export industries effective from 1966. Beginning in 1967, discounts on railway freight and electricity rates of 20 to 30 per cent were allowed for some exporters whose utility charges constituted a large share in their total production or export costs. To those exporters who had developed a new export market, monopoly rights to export in that market were also granted between 1967 and 1971. Within the established system, the government could flexibly adjust the level of implicit subsidies by increasing or decreasing wastage allowance and preferential loans for exporters.

Although emphasis was placed on export-oriented industrialization, import substitution in selected major industries was also promoted by means of tax concessions and preferential credit allocation during this period. The major import substitution industries promoted included shipbuilding, iron and steel, machinery, and petro-chemicals. Although these industries were initially promoted for import substitution, some of them, particularly shipbuilding, have become new export industries. The machinery industry is now promoted not only for import substitution but also for export expansion.

All these incentives and government prodding have led to rapid export expansion. It began from the small base during the transitional period (1961-1965) and has continued ever since despite expanding base. Between 1960 and 1965 the nominal value of commodity exports increased

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from $ 33 million to $ 175 million, achieving an annual growth rate of 40 per cent. During the following twelve years exports grew by about 40 per cent annually. Even discounting for the rise in world prices, the export volume increased by 38 per cent and 34 per cent annually during 1960-1965 and 1965-1977, respectively.

The rapid growth of exports was accompanied by a substantial change in the commodity composition of exports. Korean exports in the fifties were mostly primary products such as tungsten, iron ore, raw silk, agar-agar, fish, rice, etc. Manufactured exports were only a small fraction of total exports until the early sixties. Manufactured exports have, however, increased more rapidly than exports of primary products since the early sixties and comprised almost 90 per cent of total exports by 1976. Major Korean exports in 1976 were such manufactured goods as clothing, electrical machinery, textile yarns and fabrics, footwear, plywood, transport equipment (mainly ships), and iron and steel products.

This expansion of manufactured exports, of course, necessitated the rapid growth of imports for export production. The direct import content of exports, which had been nearly zero until 1963, increased rapidly to about 47 per cent by 1968. After that year, however, the import content of exports did not increase substantially and annually fluctuated from 37 to 50 per cent.

Along with the structural change in export commodities, Korea significantly diversified her export markets. In 1965 about 60 per cent of Korean exports went to two rich countries: the United States and Japan. Although the two countries' share showed some fluctuation between 1965 and 1976, it declined to about 55 per cent in 1976. This decline in the share of the United States and Japanese markets resulted from continuous increases in the shares of exports to Europe, Middle Eastern countries and other areas outside Asia. The diversification of export markets becomes more obvious if it is measured by the number of countries to which Korea exported. Until the early sixties Korea exported to only 19 countries, but the number of countries to which Korea exported increased continuously to reach 175 by 1976.

The rapid expansion of exports has contributed to a significant acceleration of GNP growth since the early sixties. As exports increased at a substantially faster rate than GNP, the share of gross exports in GNP rose continually from about 2 per cent in the early sixties to 30 per cent

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by mid-seventies. If the import content of Korean exports is deducted to obtain net exports, the net exports to GNP ratio grew from about 5 per cent to 15 per cent between 1963 and 1976. The growth rate of GNP accelerated from about 4 per cent during 1953-1962 to 10 per cent during 1962-1976. Import substitution was much more important to Korea's industrialization during the period 1955-1963 than export growth, but the relative contributions were reversed during the later period. The policy shifts in the first half of the sixties were quite effective in changing the pattern of industrialization. In any case, if all periods are combined, it is clear export expansion contributed substantially more than import substitution to growth, since the output expansion in later periods was overwhelmingly greater than in earlier years.

Export-oriented industrialization accompanied rapid increase in employment. Direct employment in manufacturing production for export rose from about 3 per cent of total manufacturing employment in 1960 to 19 per cent by 1970. Including the indirect employment generated by exports, more than one quarter of manufacturing employment and nearly 10 per cent of total employment in 1970 was attributable to exports.

Korea's industrialization and export drive followed its comparative advantage in factor endowment. In the early sixties, Korea had the typical characteristics of a labour surplus economy. We may, therefore, safely assume that Korea's comparative advantage, at least during the sixties, lay in labour-intensive as opposed to capital-intensive activities, although a country's comparative is determined, not only by the factor endowment, but also by many other conditions. The direct as well as total (direct plus indirect) labour intensity of manufactured exports was substantially greater than that of imports over the period from 1960 to 1968. But the labour intensity of exports declined rapidly after 1968 roughly to match that of competitive imports by 1970. In fact, the direct labour intensity of exports became lower than that of competitive imports by 1973, although the total measures for exports and competitive imports were identical in that year. Comparative advantage is shifting rapidly in Korea.

This Korean experience is now in academic circles a very popular example of correct industrialization policies for a developing country. There are other success stories, like Hong Kong, Singapore, and Brazil in South America. Hong Kong and Singapore are small city states and for that

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reason their pattern of development may not be too applicable for the bigger countries in Southeast Asia. The Korean and Brazilian experience seem to have one thing in common: domestic inflation higher than in the industrialized countries, their major trading partners, and frequent devaluations to maintain the purchasing power parity of the currencies and maintain the competitive strength in the export markets. The difference between Korea and Brazil is that the latter has much more natural resources and a greater domestic market to strengthen its comparative advantage.

Two aspects are claimed to be of crucial importance in the Korean case, as part of a correct package of industrialization policies. First, the over-all levels of protection and subsidy are low, and the export-oriented industrialization did not result in any substantial inefficiencies. Second, Korea may have succeeded in the smooth transition to an export-oriented policy in the earlier part of the sixties because import substitution had not progressed to the development of high-cost, intermediate and capital goods industries.

The Southeast Asian countries are probably still in the import substitution phase of their industrialization, with different nuances. Indonesia is still in the "easy" import substitution phase with practically no exports of manufactured goods (if exports of mining products are excluded; on the other hand, it is beginning to build up an export capability in cement and fertilizers). The Philippines, Thailand and Malaysia have already significant exports of manufactured goods, though mostly still based on labour intensive and low technology goods, such as garments, footwear and electronic assemblies.

To isolate export industries from the vagaries of domestic economy, in terms of fiscal levies, inflation, red tape, etc., a popular solution is the establishment of export processing zones, near seaports or airports. Such locations combine the cheapness of labour of the host country with inputs from developed source countries more or less at their home costs. Of course they are additional costs: usually labour at such locations fetches a higher wage than in more native locations and the foreign inputs are burdened by transportation costs, but nevertheless, significant cost savings are experienced, making the products very competitive internationally. Actually, Korea has also practised export processing zones with success. In contrast, Indonesia, the lowest income country in the region, tried the

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same but without much effect. The scale of the project (near Jakarta harbor) was probably too small, development costs too expensive, labour wages significantly higher because of the location, the import duties drawback system very cumbersome and timeconsuming, the utility rates too high, etc. The cheapness of labour could not be materialized in the total cost, because it was swamped by other, high cost elements. After the devaluation in November 1978 (Rp 415 per US dollar became Rp 625 per dollar) and intention to streamline export related procedures, the situation may improve.

The southeast Asian countries have been doing not too badly with their exports. Their comparative advantage lies with their natural resources and also with their cheap labour. They have more options than Korea had in the fifties and early sixties. Korea's exports of traditional goods such as tungsten, iron ore, raw silk, agar-agar, fish and rice fetched only less than one hundred million dollars, nothing compared to the traditional exports of Malaysia, Thailand, the Philippines and Indonesia.

When the southeast Asian countries tried to diversify their exports, they were kind of latecomers, and the markets in the industrialized countries for labour intensive manufacturers were already occupied by countries like Hong Kong, industrialized countries slumped, and protectionist sentiments emerged. The life of these latecomers was and still is not easy.

The following quotation is probably representative of the problems in the large southeast Asian countries. We quote from an official document of the Government of Thailand: "The Fourth National Economic and Social Development Plan (1977-1981)" on page 195:

"Policies for promoting export-oriented industries were formulated in 1970 and specific measures to promote such exports were introduced in 1972. The main export promotion measures include the tax refund to producers for imported inputs used in the production of export goods, special promotional privileges according to the investment Promotion Act such as the exemption of import tariffs and business taxes on machinery

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and other factors of production of export goods as well as other promotional privileges to reduce production costs such as preferential electricity rates. Furthermore, the Government also provides export credit through the Bank of Thailand and financial assistance through the industrial Finance Corporation of Thailand.

One of the main obstacles to the expansion of Thai exports arises from the fact that many foreign countries and groups of countries which import products from Thailand such as the European Community, Japan and the United States have set up tariff and non-tariff barriers to protect their domestic industries. In addition, many export promotion policies have not been effectively implemented due to the large number of government agencies responsible for enforcing regulations and laws concerning exports. Changes in government export policies to deal with immediate and short-run problems are often made without due consideration to long-run implications for exporting. The existing tax structure favours import-substitution industries and in some cases has adverse effects on exports. The present policy of refunding tax paid on imported inputs of export products is not fair to exporters of similar products due to the method of calculation that has been adopted. Also, this measure does not benefit export industries as a whole as most export goods do not use imported inputs. Finally, long-term export credit is not readily available for Thai exporters.

During 1960-1972, import-substitution industries expanded considerably. Since 1960, the processed food, beverages, cigarettes, primary goods such as petroleum products, yarn, glassware and durable goods such as construction materials and cement were produced. After 1966, the import-substitution industries expanded in the areas of paint, automobile tyres and textiles. In promoting import substitution, the Government accorded high priority to consumer goods vis-à-vis primary goods, intermediate goods and capital goods with high import content. The Government provided a high level of protection for these industries by increasing tariffs on imported finished products and reducing import duties on raw materials. The distorted national resource allocation pattern was unfair

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to consumers since they had to purchase products at prices which were artificially inflated. In addition, this distortion inhibits competition which adversely affects both production efficiency and the stability of long-term industrial structure since the present high rates of protection encourage investors to invest in projects with quick returns on investments."

The above statements could have been written for Indonesia. Export promotion often clashes with domestic (i.e., import-substitution) industry protection. When export promotion is not accorded top-priority, it may easily get entangled in the interagency bureacratic confusion. For Indonesia there has been the additional handicap of an overvaluated exchange rate.

Apparently, Malaysia is more satisfied with the progress of its manufactured exports. The official document of the Government, the "Third Malaysia Plan 1976-1980" mentions (page 312) that "the export performance of the manufacturing sector during 1971-1975 was impressive, increasing by about 29 per cent per annum compared to the growth target of 15 per cent under the Second Malaysia Plan. The share of manufactured exports in gross merchandise exports accordingly increased from 11.4 per cent in 1970 to 23 per cent in 1975. In Peninsular Malaysia, the main manufactured exports comprising food, rubber products, industrial and electrical machinery and wood products, together accounted for 87.4 per cent of total manufactured exports during 1971-1975. The growth of textiles and electronic exports was particularly rapid. Gross exports of textiles and clothing including leather and footwear increased by about 22 per cent per annum in real terms during 1971-1975. The realization of the full export potential of the industry was, however, limited by quotas imposed by several developed countries. Exports of electronics and electronic components increased sharply during 1971-1975. These were largely from international concerns located in the Free Trade Zones established in the years 1972/73. Gross exports of machinery and transport equipment increased by about 26 per cent per annum in real terms between 1970 and 1975. These, in particular transport equipment, were mainly exported to the neighbouring countries such as Singapore, Thailand,

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Indonesia and Hong Kong."

Principal markets for Malaysian manufactured exports were Singapore, the United States of America, Japan and the countries of the EEC. Apart from rubber and tin, the United States is an important market for a wide range of manufactured goods, particularly wood products, textiles, clothing and footwear and food products. With the enlargement of the European Economic Market in January, 1973, the EEC has become one of Malaysia's leading trading partners, accounting for 20.9 per cent of total manufactured exports. Exports of canned pineapple, however, fell significantly, because of the phased imposition of the Common External Tariff on canned pineapple by the EEC.

Manufactured exports expanded, from M$ 393 million in 1970, to M$ 1,912 million in 1975, an average annual growth rate of 37.3 per cent. To contrast import-substitution and export-oriented industrialization as an either/or proposition is an misleading way to represent the choice. Both markets, domestic as well as foreign, are tapped in the course of industrialization. In the Korean example this has been the case. Korea started first with exploiting the easy alternative, in the fifties and early sixties. Only after the early sixties was there a clearcut emphasis on export-led development. But even in the second period import substitution, or import-competing, industries were fostered. Yet there seems to be always a policy insistence that even new import-competing industries make a serious effort to start exporting. Export capability of industries, old and new, are emphasized.

Modern industrial development, in the developing countries, does not proceed in a vacuum, free of government interventions and free of international trade barriers. Because industrialization is state policy there is a lot of policy intervention. Policies providing incentives and protection surround the growth of those industries. Hence there will be two sets of incentives, one to foster the growth of import-substitution or import-competing industries, another for export-oriented industries. Each one may be a complex system. Apart from fiscal and commercial policies there are also institutional and even political policies designed to support the

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same objectives. The crux of the problem, probably, is to strike a good balance between import-substitution promotion and export drive of manufactures. Good balance means that one set of policy instruments does not work counterproductive to the other. Import-substitution promotion policies should not pollute the atmosphere for export promotion. This could happen if export industries have to buy intermediate goods produced by import-substitution industries at higher than world market prices, because of the protection granted to import-substitution industries. In the Korea case, export industries could procure these requirements from competitive sources abroad, free of import duties and other impositions. Later, when import-competing industries were set up, these domestic sources were sanctioned to sell to those export industries as if the transaction were exports, e.g., drawbacks for paid duties and other indirect taxes are given.

In such an industrialization policy the important question is: when will the intermediate goods (and later capital goods) industries be set up, so as not to negate comparative advantage? Should the country wait until the market, both domestic as well as international, justifies full economies of scale? Could the technology be obtained not too expensively?

In practice, developing countries are often in a hurry. They cannot wait. And may be properly so. Good planning is to be able to foresee problems, constraints, and opportunities. Market saturation, trade barriers, product obsolesence must be encountered early by product line shifts, capital deepening, market diversification, etc. In the course of these preparations it may pay to start a new industry earlier than according to the strict dictates of comparative advantage. Korea, for instance, facing current trade barriers in the world, is planning to diversify its exports to more capital intensive products, like petrochemicals and automobiles. Indonesia, being a late comer and finding markets for labour intensive goods practically closed or pre-empted, may be tempted to exploit its advantage in natural resources, but for which it may have to set up large scale and capital intensive industries, with their own market risks. It may decide to set up such industries as a long run strategy and invoke infant industry argument to subsidize or otherwise protect the initial

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period of operation.

An ambitious government, however, can easily overdo in invoking infant-industry argument and rigging the whole price system by too many interventions. The usual presumption is that such acts carry its own penalty by producing less growth, because of too many inefficiencies. In the Korean case the general level of protection and subsidies seems to be modest and efficient allocation of resources and the development of industrial efficiency proceeded in a reasonable fashion. Not all industries are efficient, or equally efficient, and those lesser efficient industries apparently could survive and even flourish. In a country where the workers do not have strong labour movements and where differences in productivity can be rather easily compensated by difference in wages, it is the workers' class that contributes in the subsidies.

In the Korean case export promotion policies have had the overhand above import-substitution policies. In other countries it may be said that such two policies are more equally balanced, for instance in the period where the import-substitution opportunities are still legio. In such a situation, if there is an obvious clash between the two requirements, how should it be resolved? For instance, if domestic industries producing intermediate goods, components and other requirements for export industries are charging higher prices than international supplies? The first option is to invoke the argument of tax neutrality. Rebates should be given to all indirect taxes paid by such industries. If this is not enough then the Government has a problem. It may protect the export industry and forego some protection of the import-competing industries by allowing the export industry to purchase its supply from abroad, thereby denying the domestic industries of a certain market. This is an example of supremacy of interest of export industries above import-substitution industries, if a conflict of interest cannot be resolved. Another option for the Government is to engage in subsidizing the sale so as to match world prices. If in the industrial policies there is insistence that such domestic industries can be set up only if it can be proven that they can export part of their output (even at less than full costs) then such conflicts could be avoided.

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In analysizing the case of export oriented industrialization two more questions remain to be posed. First, who are the industrialists and entrepreneurs who can successfully gauged the international markets and face competition successfully? Even in the old colonial days when the southeast Asian countries produced agriculture and other primary commodities for the world market there were investors and trading houses from the metropolitan countries who knew what European and other world markets needed. Producing and array of manufactured goods and marketing them abroad is much more complicated. The bridge between production and markets should be effective. The second question relates to the uncertain state of foreign markets nowadays. With world economy slowing down in some kind of a Kondratief cycle and the industrialized countries becoming protectionistic, export oriented industrialization, especially for relative late comers among the developing countries, will encounter some pitfalls..

So far foreign investors have played the most effective part in initiating industries for the export markets. They performed the role of innovating entrepreneurship, which later was followed by domestic entrepreneurs after the latter have familiarized themselves with the requirements of the foreign market.

When off-shore production of labour intensive articles was started the initiative was probably taken by the established producers in the major industrialized countries who conceived the idea of moving some of their new operations to lower wage locations, first to Japan, then to Hong Kong, Korea, etc. Most of the electronic companies now operating off-shore assembly plants in southeast Asia for export are foreign companies who have branched out their operations into cheap labour locations. Many garment plants working for the export market are now already local operations, but they are tied to foreign buyers by contract. The simplicity of technology enables the contracting out of the operations to local entrepreneurs. For electronic assembly and sub-assembly this does not seem to be easy as yet.

Multinational companies are great international marketeers. They have their production operations in many countries, often serving the

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local markets, but whenever possible and profitable they can engage in some kind of international division of labour between their various national plants. The motive for exports can be a variety of things, among others, international brand competition and filling underutilized capacity. But there are other instances where an operation of such a multinational company in one country is prohibited, by its own head office, to export to another country. This is an article of restraint of trade which has found many criticism among the host developing countries. There may be a tendency, however, for such restrictions to decline, may be partly because of this opposition. Often, the management of the local branch, faced with under-utilized capacity, is more ready to tap export markets. Often they have to convince a reluctant head office of the wisdom of such acts.

Southeast Asia is also a popular hunting ground for the big trading houses, from Japan, from Europe and some from the region. These trading houses are marketeers par excellence. They have branches all over the world and they can really help marketing manufactured goods of the low income developing countries in other parts of the world.

The breaking out from the confines of the domestic market into the international market is an act of innovation. Different specifications, standards, designs and qualities are required. Different risks are involved. The marketing and financing are handled differently. These are all difficult tasks for domestic entrepreneurs. Some of them may be able to do it, but many have to be assisted. The collaboration with foreign partners already familiar with the international market scene is an effective way to overcome these shortcomings. In today's world of easy international travel and access this is not a very difficult problem, but the over-all governmental policies should facilitate such contacts and collaboration.

In the end this export performance should rest on a self-sufficient national capability. For this, apart from manufacturing capabilities the country should develop its marketing institutions and know-how. The banking and financing institutions should also be upgraded to take on the function of financing exports of manufacters, rather than selling primary commodities on an f.o.b. basis only. In summary, there is a lot of institutional development requirement involved in promoting exports of manufactures. A

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practical solution is to involve foreign investors, multinational companies and international trading houses, in the initial stages, and try to promote a smooth transfer of know-how from these parties to national entities. The Government should have the right attitude and policies to facilitate all this.

The second question relates to how latecomers developing countries wanting to develop export oriented industries can find their way in a slower moving world, where doors are kept ajar and have high thresholds. There is indeed no easy solution, and one has to try very hard, with all available means, to stay competitive and to create the demand where such is possible. One has also to look at the silver linings. Although world demand will grow more slow in the eighties, if the world economy continues to grow three or four per cent, this will by itself provide for a lot of additional markets, and exports of such manufactures could grow some twenty per cent per annum for the developing countries. For latecomers with presently little of such exports, such as Indonesia, the quota system even helps to secure some initial market. The most difficult part is perhaps this initial period where the whole physical and institutional infrastructure is not geared yet to support these exports. Other countries, already past the initial stages, have to engage in further innovations, with respect to products and product lines, as well as market diversification. From textiles, garments, electronics and consumer goods, such countries could try their luck producing and exporting engineering goods, simple machinery, components, vehicles, electrical goods, etc. The development of local and regional markets can be used to good advantage, because they may enable scale operations and thus enhance competitiveness. East Asian and southeast Asian markets may even grow significantly faster than the markets of the industrial world and their industrial markets may grow even faster. Market diversification to these regional areas may provide an important new outlet for exports. Political developments leading to these widening of markets should be encouraged and mutually supported by give-and-take arrangements.

The fast growing industrializing developing countries, like Korea, Hong Kong, etc., will also experience shifts in their comparative advantage

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because of increasing wage rates and shortages of labour. These countries will have to move out of their traditional labour intensive exports of manufactures. Their labour intensive imports may grow, and here is another chance for the southeast Asian countries, latecomers in the game of establishing export oriented industries. Indonesia has for more than a decade exported unprocessed logs to Korea and the latter country has been a major exporter of plywood. Before, Indonesia exported also a lot of crude rubber to Singapore to be further processed and reexported. These divisions of labour are changing. Indonesia will have greater opportunities to process the raw materials itself and export them in more fabricated form. One has also to remember the shifts of locational incidence of textile industries, first from Japan to Korea and Hong Kong, and then to countries in southeast Asia. Indonesia is now the lowest income southeast Asian country with the lowest wages. It should be possible for this country to use this as an asset to set up labour intensive industries for export and to have these exports grow some twenty per cent per year, starting from a low basis. Once it has gained a momentum it must rely on its entrepreneurial resources to continue the growth.

## III. OTHER BASES FOR INDUSTRIALIZATION: AGRICULTURE AND MINERAL RESOURCES

In industrialization related to markets, especially world markets, the developing countries' comparative advantage is often perceived in a two factors world, labour and capital. The developing countries, especially the low income ones, are positioned as having an abundance of labour at low wage rates, but lacking in capital. Thus industrialization should proceed along labour-intensive lines working for the world market. Since external capital is relatively mobile and can be brought into these countries at a cost below its scarcity rent, it strengthens further the labour-intensive exports proposition. The classical examples of this line of specialization in the past decades were the electronics assembly, the garment plants and the toy manufacturing industries, in places like Hong Kong. Also leatherware, foot-wear and sporting goods are less capital-intensive and labour-intensive in their production.

Southeast Asian countries like Indonesia, Malaysia and the Philippines, however, have other trumpcards for comparative advantage. They have natural resources, while Indonesia and Malaysia have ample energy resources. These endowments could also be used as the basis for industriaiization, oriented towards the world market as well as for domestic use.

To what extent could agriculture, mineral and energy resources be used to create new opportunities and strengthen the process of industrialization? The official doctrine in Indonesia with respect to industrialization, for the past ten years and this will continue, is that it should be related to agricultural developments. In the first five-year plan priority was given to those industries supporting agriculture. In the second five-year plan (ending March 1979) priority is given to industries processing agriculture raw materials into intermediate products. In the third five-year plan the emphasis should be placed on industries capable of further processing those intermediate goods into finished products. In the fourth five-year plan (in the middle 1980s) industrialization is conceived as building the capability of producing the machines, equipment and other capital goods, required to continue the industrialization process. Of course in real life the growth of industries is not only linked to the requirements of agriculture. The strongest link was with the existing market, meaning that the greatest and most easy opportunities lied in exploiting the existing markets through import substitution. One cannot even make a strong claim that industrialization proceeded to serve the bulk of the population which is engaged in agriculture, because on the supply side the strongest impulse

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so far came from private investments exploiting more urban markets, where effective demand is the greatest and the tastes more suitable to what these multinational companies and other private investors can easily offer.

There is one product, however, where there was strong growth, namely fertilizers. Indonesia has a natural resource based comparative advantage in this respect. The size of the market could sustain economic scale production and capital was provided at reasonable rates through bilateral and multilateral official foreign assistance. The investments occured mainly in the public sector. Foreign investments were not so keen entering this sector because of the political risks. The industry being in the (price) controlled sector, because of its vital relation to agriculture, became less attractive to foreign investments. After some 10 years of rapid growth in this nitrogenous fertilizer industry, Indonesia is now in a position to export part of its production. An ASEAN urea fertilizer project is also being prepared, based on North Sumatra natural gas. There is one interesting aspect in the feasibility study of this project that sheds additional light on this comparative advantage. The gas for this urea plant is to be priced well below the current opportunity cost, that is, the price for the same gas through liquefication and export as fuel. Hence there is an element of subsidization, on the basis of opportunity costs, in exploiting this line of comparative advantage. But this is only so because there is an effective opportunity cost in the location of this North Sumatran plant. The gas comes from the same giant size gas well feeding the liquefied natural gas plant for exports to Japan. In other locations such facilities do not exist and the opportunity cost of the gas is only the best local price that can be fetched.

Multinational companies are not entirely absent in serving the agriculture markets. In Indonesia they came in the pesticide, herbicide and other agro-chemical industries. These investments, however, were mostly of a formulation plant; again an import-substitution industry set up behind protective barriers. Multinational companies were interested to come in and invest because they have a market to protect and because they have patented products, selling in imperfect markets with fair profit margins.

There was also a market for agriculture tools and implements. Simple ones, like hoes, and mechanized ones like pumps and small tractors. Three types of entrepreneurs filled the market place: private domestic ventures of small and medium size, state enterprise of larger size and multinational companies. The multinational companies came where there was a quality and branded product to offer, or an existing market share to protect. State enterprises filled a place where large-scale factory operation is more effective and where competition

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with established brands was not so sensitive, for instance, stamping of hoes. Domestic private companies produce in smaller or medium scale units, from provincial towns, serving a regional market. The Government has tried to stimulate village industries making simple agriculture tools, like hoes, through local foundries and blacksmith operations. These operations are not completely dispersed or decentralized. Productivity and economies are gained through localization, that is, in a province or region there is often one or two places where such activities are concentrated as people's industries. The Government has assisted such rural localization industries by providing a central workshop, some technical assistance, also in the building-up of a co-operative. The industry is labour intensive. The products are not of high quality are sold at lower prices than the products of more urban manufactures.

When products can be made with different factor intensity, centralized or decentralized, by domestic firms or multinational companies, there is a problem and an opportunity for the Government to regulate competition so as to better achieve the objectives of industrialization. Without government intervention, economies of scale, capital intensity, branded products with distribution back-up, will most always win. If the Government wants to promote maximum employment, distribution and dispersion, it must intervene in the market place. It can do so in two manners: impose differential (indirect) taxes, giveng an advantage to the promoted industries, and leave then things to the market mechanism, or to restruct production of the stronger sections of the industry in order to give more elbow room to the promoted sections. The latter method will create artificial scarcities and producers' rent in the restricted production, if quality differences are real. It is better to regulate the market through differential taxation.

The processing of agriculture commodities into intermediate products and final goods, for exports and domestic sale is proceeding well. Such products are, for instance, rice (processed in large-scale mills as well as in village hullers), cassava (processed into pellets for exports or in mills for tapioca flour), rubber (smoke houses, remilling, crumb rubber plants, for exports and in rubber goods industries for domestic market and also for exports), timber (saw mills, veneer and plywood), palm oil (crude extraction, refined oil manufacture). No major policy problems are recognized in this sector. The technologies are conventional, the operations of small- and medium-scale mostly, the entrepreneurs domestic and private, the capital requirements moderate. There has been a controversial issue with respect to the rice hullers, run with a small gasoline or diesel engine, that have invaded the villages. Criticism was raised in that these machines had a labour displacing effect. Hand-pounding of paddy was virtually wiped out. The counter argument was that the process of labour

displacement has occurred much earlier, when machine processing was introduced by the big rice mills. The small hullers are competing with these mills, not so much with the hand pounding. Mechanization of all agriculture processes in densely populated and poor countries like India and Indonesia will always entail this controversy, which never will be satisfactorily resolved.

Modern agriculture in Southeast Asia is organized in plantations with important, and often large-scale, factory processes. Examples are the sugar industry, the palm oil, rubber and tea plantations, all with their processing establishments. Such agro-industries can assist the industrialization process of the country, or of the region, in an important way. Repair and maintenance facilities develop in the region. The existence of the many plantations gives also rise to the growth of engineering industries, often with design capabilities. Plantations tend to localize, and such facilitates external economies. Yet in the past linkages between the large-scale establishments and smaller scale and more indigenous ventures did not develop well enough. The large-scale plantation establishments, often of foreign origin, tended to be self-sufficient enclaves. There should be more government insistence, backed up by appropriate tax and other incentives, to decentralize the system, and to have more sub-contracting relationships between the large establishments and smaller scale shops.

Southeast Asian countries are potential mining countries, and mineral development can also become a basis for industrialization, although the spread effects are limited. Tin mining can be organized in various scales, with differing capital intensity. There is also a strong localization tendency because of the geographical distribution of the deposits. The processing into concentrate and metal can be done within the country because economies of scale are not formidable. A scale obstacle is encountered if tin is to be further used for domestic consumption, particularly for tin plating. The domestic market, and export markets, for canning in individual countries are probably still too small to warrant an economic scale tin plating industry. Probably an ASEAN project could be promoted in the intermediate future. A tin-plate industry is actually more part of the steel industry since the amount of tin consumed is relatively small.

Southeast Asia has good potential for nickel, copper and aluminum development. Indonesia and the Philippines are nickel and copper producing countries with processing facilities. Malaysia exports some copper ore or concentrate. Indonesia has some potential in bauxite and alumina processing; it is building a big aluminum smelter based on abundant water power from the

Asahan river in North Sumatra. Scale economies, and financing of these huge projects, are the main problems. In nickel the supply side justifies scale economies for processing and refining for export markets where the domestic market is still too small. In copper the individual country's production does not justify a full-fledge international scale smelter operation, and because of this Indonesia (with about 60,000 tons a year copper content production in the form of concentrates) does not have a domestic copper smelter as yet. In the Philippines, may be because the operator is a national company, a smaller scale smelter is in operation. In Indonesia, the foreign multinational company is reluctant to engage in smelting operation because of this scale limitation, probably also because of the life expectancy of the mine. Exports of concentrates is commercially more safe. The size of the domestic market is still not adequate to hasten the establishment of such a smelter. These domestic markets are expected to grow rapidly during the next decade, and if the ASEAN Market could be secured then such metal refining industry could be set up in the region. Local availabilities of the metals tend to promote domestic use in fabrication industries. The mines and their processing facilities, however, are not likely to have major stimulating effects on industrialization, because these operations are often in out-of-the-way places, self-contained enclaves and very capital intensive. The Government is trying to promote a greater local content involvement and given time this mass become effective. There is already a lot of procurement fall-out within the southeast Asian region of large mining projects in one country, especially to Singapore.

In terms of energy resources southeast Asia has significant potentials in oil- gas, coal and geothermal energy. Combined oil consumption will soon reach one million barrels a day and on this basis there is ample room for the growth of refining capacities and also of petrobhemical industries. The locational factor also is very helpful, especially for Singapore, to augment the size of the market by extra-regional exports.

For a country like Indonesia, and also Malaysia, the significant energy endowment provides it with an opportunity to facilitate the process of industrialization by subsidizing its energy cost. Because of the large tax margin on oil production the nature of such subsidy is the amount of tax foregone. Cheaper energy cost could compensate for the higher capital costs (because of importation of capital equipment) and lesser economies of scale. The cost of electricity, for instance, is often significantly higher than what prevails in industrialized countries, because of inefficiencies in the system, and subsidizing the fuel costs is a neutralizing policy. Hence, abundant and cheap

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energy is a distinct comparative advantage for countries like Indonesia, and such countries could specialize in energy intensive industries, like aluminum, cement, petrochemicals, steel, etc.

In short, the factor endowment of Southeast Asian countries, like Indonesia, provides the countries with a possibility of diversification, and this makes it (at least potentially) less vulnerable for certain market limitations in the global scene.

## IV. INDUSTRIALIZATION IN RELATION TO BASIC DOMESTIC NEEDS

The most difficult area where objectives and policies may have to be resolved in the process of industrialization is where industrial development, on the one hand, traditionally follows the market, and on the other hand, it is now expected to serve the basic needs of the people, in terms of employment, and the essential goods and services those people require in their everyday life.

The market, that is effective demand, is usually strongest in urban centres, coming from the elite, the middle class and the workers in the modern sector. These classes of people live above the poverty line. On the other hand, in countries like Indonesia and other low income countries some 50 per cent of the population lives below the poverty line. The latter category lives mainly in the countryside, although there is a good deal of it in the urban areas because the rural poor tend to migrate to the cities in the hope for jobs. They perform all kind of work and menial services for a very low pay. Unemployment, but mostly underemployment, is considerable. Effective demand for manufactured goods is limited. The bottom poor is often not a good customer of modern manufacturing industry.

Among the Southeast Asian countries probably it is only Indonesia that has this problem on a national scale. The other Southeast Asian countries are already in the category of middle income countries. If there are similar problems in such countries they tend to be localised in certain regions, poverty pockets or depressed areas, and the alleviation of their plight is more practicable. Like in certain industrialized countries which sometimes also have such problems, something can be done by a policy of industrial location, that is, the provision of extra incentives for industries to settle in such regions.

Often the argument is put forward that industries, and industrialization, can never provide enough jobs for such predicaments on a national scale. In terms of employment this bottom poor has to be helped where they are, or where they originate, that is, in the rural sector, through agriculture employment and related activities.

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Village and cottage industries could be promoted, with government help, providing simple goods and services for local consumption. People's basic needs are mainly in food, clothing, shelter, education and health. Can small-scale and cottage industries supply these basic needs items on a competitive basis? For food, the rural sector is traditionally self-sufficient. However, food processing is also done in urban locations, because from such points the goods are distributed regionally or nationally. Processed food is also best sold in towns where the market is stronger.

In clothing, the village self-sufficiency is probably eroded a long time ago. In certain regions handloom weaving is still practiced, making traditional cloth. Often the government is protecting this activity by prohibiting the manufacture of these traditional items through factory production. In Indonesia, for instance, striped woven sarongs can only be made by handlooms. Batik patterns are reserved for traditional batik processes using wax.

Today, most of the textiles, also for mass consumption, is produced by urban based middle and large scale factories, operating machine looms. Even handlooms are not completely decentralized. Textile industries and handicrafts tend to localise , that is, tend to cluster together in certain locations, because of external economies and traditional pools of skilled operators.

Village people has a fairly high degree of self-sufficiency in the provision of building material for their simple houses. Only cement (used in small quantities), nails and some paint and glass are procured from factories in the cities.

Stationery for educational needs and medicine come from the cities also, although probably most medicine is of local origin in the form of traditional herbs and extracts.

One approach to this problem of providing basic needs goods is to distinguish two sectors of industry, the more modern manufacturing industry and the small scale and village industry. The first lends itself not too well for decentralization because usually the scale is large, requiring central locations. Because of limitations of industrial sites one often enough sees modern factories located in the middle of paddy fields, somewhat away from metropolitan centres. It is wrong, however, to put them in the category of labour-intensive rural industries.

One conceptual problem has to be cleared first. Is it right to expect that most, if not all, of the basic needs of the people can be provided for by small-scale establishments located near where most people live? This may be

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stretching efficiency too far. Chemical fertilizers for food production, cement production for the building of shelter, printed textiles, printing and writing paper, etc., are best to be produced in large-scale modern factories. Of course, there are still possibilities of varying scale operations. Cement can be produced in a factory with a capacity of one million tons a year or more, but it can also be produced in smaller plants of 150,000 tons a year capacity, but even the latter scale will not make it a small-scale village industry. The smaller scale may employ more labour per unit of capacity, and this scale lends itself better for decentralization of the cement industry. The pertinent question in this case is whether or not the small-scale operation will produce the commodity at a low enough cost to the consumer, i.e., on a delivered basis.

Is it economically justified to demand that industrialization should also serve the now popular concept of basic needs? The so-called basic needs approach is a policy aim of high priority to provide more for the bottom poor of the people living below the poverty line, by providing more productive employment to those people and to provide basic needs goods at affordable prices. Although agriculture employment should provide the bulk of the new opportunities, non-agriculture engagements should be promoted also in those rural areas. Here is where rural industrialization comes in. One crucial question here is whether or not this should be achieved by hamstringing the more modern factory production, like what India is now trying to do by restricting about 800 industries, in the sense that additional new production capacities in these lines of production should be reserved to small-scale enterprises. Since the big masses of under-privileged people in Asia live mainly in the Indian sub-continent and in Indonesia this question is pertinent mainly in these countries. The other countries in Southeast Asia probably do not have to pose this question. India may have very valid reasons to resort to such policy of industrial restrictions to promote small-scale and village industries, because of the lack of alternatives, the immense gravity of the social problem, and (may be most important) the availability of indigenous technology and entrepreneurial resources. Indian small-scale industries may be fully capable in producing these basic needs goods at acceptable standards, may be at the sacrifice of some quality, if compared to the products that are manufactured by the urban large-scale industries.

Whether for a country like Indonesia it would be appropriate and wise to follow the same policy is debatable. The availability and growth of domestic capabilities in the field of technology, management, financing institutions, marketing and distribution, government extension services, etc., is in a far

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more advanced stage in India than in Indonesia. If large-scale industries are restricted and thereby small-scale industry is given an extra elbow room to grow, the supply response may be adequate in India, but it might not be so in a country like Indonesia. The answer may lie, not in restriction and protection, but more in stimulation, provision of developmental assistance, incentives, subsidies, etc. If the supply response to restriction of large-scale manufacturing is not good enough then such policy may entail too high a social cost. Of course, the Government should take care that the price system and the tax and duties system do not unduly work to the disadvantage of the small-scale producer. The foreign exchange rate should be right and not over-valued. Sales taxes should not penalise unintegrated and small-scale production; preferably they should provide for some advantage. Availability of credits and rates of interest should also help the small-scale producer. The weakness of small-scale and village industries lies in product development, quality control, marketing, procurement of raw materials, and management. The best solution is their link up with more modern entities that can supply or help with these inputs, in a sub-contracting or putting-out system.

At the moment many of the goods bought by the masses are produced by urban factories, often large scale. Such factories are located in metropolitan centres of industrial agglomeration, but some of them are located in provincial towns and in other regions. Many of the goods are also produced by multinational companies, such as soaps, detergents, cosmetics cigarettes, pharmaceutical products, edible oils, flash-light batteries, etc. Cooking and eating utensils, bottles and other containers, glasswares and plastics, matches, etc. are often produced by domestic companies of medium scale, often of urban location. Of course there are also goods, simple, low quality and cheap, produced by cottage industries, like earthenware, wooden articles, brooms, simple agriculture implements such as hoes and harvesting tools, made by village blacksmiths and handicraft. These supplies tend to be stationery, while the goods coming from the cities are more dynamic and expansionary.

There is one aspect of the operations of the multinational companies that merits attention, that is, their demand creation activities through advertisement (billboards, posters, mobile vans, displays) and selling efforts (through credits, sales force, etc.) are irresistable influences reaching out to the villages. Against this superiority village industries are helpless. Question is now, should there be a social policy restricting this activity because it can be considered as "unfair competition" to the detriment of local village industries? It is a distinct intervention in the market place that ordinarily should be avoided, but what is the contribution of such promotional activities to

industrial efficiency and social welfare? Of course, it supports economies of scale and thereby could contribute to over-all efficiency, but if for the sake of employment promotion and distribution of income to the rural sector some sacrifice of economies of scale is worth the while, why should it not be done? Another argument is that beyond a certain point economies of scale will support more profit rather than efficiency (i.e., lower cost of production). Advertised and promoted goods from such large-scale companies may also fetch a higher price than the local, unadvertised, goods, but the compulsion to buy may be greater.

## V. A FINAL NOTE: THE ROLE OF GOVERNMENT

The role of the government in industrializing developing countries is usually very expensive. There are several aspects of this role. First is the role as a tax collector. Public expenditures are always rising. The Government is a large investor. Moreover, the Government machinery is often also growing, reflecting the expanding role of the Government as "an agent of development". In the collection of taxes it is often easier to rely on indirect rather than direct, i.e. income, taxes. Import duties and sales taxes appear prominent in the State budgets. These indirect taxes, however, have extensive repercussions on the price system. They affect the ultimate resources allocation, although these revenue yielders are not designed for that in the first place. Because of the administrative case, however, indirect, i.e. sales taxes and import duties, are often used for protective purposes. These two objectives sometimes clash and the resolution of this conflict has to be worked out between two or more departments or ministries, for instance, finance and industry (the ministry of trade is sometimes the third party trying to protect the consumers). The objective of promotion of industrialization is sometimes lost in such inter-departmental squabbles. If sales taxes are imposed upon all transactions (and often not on a value added basis) this may penalize the decentralization of production and will favour the concentration in large-scale integrated plants. The development of jobbers and putting-out systems will be hindered.

The second role of the Government in managing industrialization is often the licensing function. By licensing industrial establishments and capacities the Government often tries to regulate entry and competition. The objective is to prevent wasteful competition and capital underutilization because of over-capacity. Investment behaviour in the private sector often follows a band-wagon phenomenon, resulting in proliferation and over-capacity.

This objective of industrial licensing is popular among governments in developing countries and is often related to the purpose of protection of

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import substitution industries. It is, however, not free of controversy. There are circles (usually academic economists) who argue that this type of protection is not advisable. Why should the Government take the risk out of private investments? Private investors should be willing to risk losing their shirt in entering a sector of industry. This type of protection breeds high prices and does not promote industrial efficiency. On the other hand, industrialists often argue that proliferation and excess capacity in a sector of industry can cause high cost production and slim profit margins, resulting in an anemic industry. The regulation, or balancing, of capacities to prevent over-capacity is a difficult exercise for the controlling department. It should decide who could come in, with what capacities, and from time to time it has to decide what to do (when, how much and by whom) if the market grows and additional capacities are required. The information system of the Government is not always adequate and such governmental departments are often barraged by lobbying industrialists. The peddling of political influence in favour of partican interests cannot be ruled out. If a governmental department has to select one or two entries among a number of candidates, often with multinational companies among them, the rightness of the choice will depend on the technical capabilities and experience, also on the integrity, of the officials. The foreign companies may use local lobbyists and this will open the door for accusations of such companies playing politics. In spite of all these complications the strongest inclination is probably this interventionist attitude, especially if ministerial bureaucracies are politically influential.

Industrial licensing is often also used to implement locational policies, also to achieve other social objectives, such as employment creation, protection of certain social or racial categories, etc.

In pursuing employment objectives industrial licensing may include the screening of technologies employed. This may be a ticklish assignment and requires really highly technically competent administrators with a back-up of public research and development institutions capable of providing viable alternatives to the propositions of the (private) investors. In practice, perverse decisions are sometimes encountered. For instance, the controlling government department objects to the importation of second-hand machinery and equipment, although such used machinery is often more labour intensive. They became obsolete in another country because wages went up, but technically they are in good order and productive; often they have been reconditioned. Such official aversion to used equipment is based on the notion that the commercial value is not easy to determine. There is concern about over-valuation of the equipment, also that maintenance costs will

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be greater and hence the productivity is questionable. But why should government officials judge about such matters and not leave such risks over to the private investors? The determination of the commercial value can be left to the arbitration of independent surveyors.

The basic issue in all these governmental regulations and interventions is the quality and value of inputs the Government can give into the planning process. Governmental controls can easy hamper and stifle industrial investments and progress. Bureaucrats are usually unimaginative. They make decisions on the basis of rules and regulations and on the basis of precedent. Decision making on the merits of a case and with a forward looking attitude can only be expected from the very top echelons, and these are often overburdened, while many decisions are not even referred to these echelons but are disposed by lower rank officials. Their input is most often not technological or judgemental, but mainly bureaucratic, meaning restrictive. The process of decision making is often also very lengthy, discouraging the investors for whom time bears a distinct cost.

In Indonesia, for instance, all this is widely recognized at the top, i.e. political, level and efforts are being made to deregulate and to reduce licensing requirements for industries. The success of such efforts still has to be seen. At any rate, it should be recognized that the kind of interventionist role of the Government in managing the process of industrialization is part of the strategic options.

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